



Module 4: Emphasis on Environmental Education, Not Advocacy

In this module, we take a closer look at the differences between environmental education, advocacy, and activism through the lens of developing our respective “EE Toolbox”. This module will start with several readings and then ask you to think through some different scenarios and personal reflections. The module will culminate with your using your creative juices to create a bumper sticker that you will share during the group discussion.

Module Opens: March 19, 2021

Module Due: April 19, 2021

Estimated Time to Complete (excluding group discussion): 4 - 5 hours

Group Discussion: Occurs between April 19th and May 19th (Doodle Poll will be sent out to schedule a date(s)).

Instructor for Module 4: EV Bell peecprogram@gmail.com

Part 1: Overview of Environmental Education, Advocacy, and Activism

Read the following research articles and opinion pieces:

- Two Hats by John Hug
- Environmental Education and Environmental Advocacy: Revisited by Bob Jickling
- Advocacy and Activism by Laura Guertin
- Should Action Be a Goal? No by Jo Kwong
- Should Action Be a Goal? Yes by Richard Wilke

Review

- Tbilisi Declaration
- Professional Development for Environmental Educators (found on Google Classroom under General) (pgs. 18 and 19).

Part 2: Critical Thinking and Reflection

- Based on the readings, use the Venn Diagram provided to list out similarities and/or differences between environmental education, environmental advocacy, and environmental activism. Multiple slides are provided in case you cannot fit all of your text on one. Click on area that says "write here" to add text.

- Using references from at least four of the articles, opinion pieces, and/or review materials in Part 1, please answer these questions (in no particular order) in the form of a two-page essay (submit as a Word document -- form provided):

- Has your perception changed on the role of environmental education with respect to advocacy and activism? If yes, please describe. If no, please elaborate on how your view was reinforced.

- Why is it important (and difficult) to separate environmental education from environmental advocacy/activism?

- Reflect on an experience in which you were the educator for a controversial environmental topic that a) you were personally passionate and b) historically has differing viewpoints (e.g., climate change). How might you adjust this program in the future with regard to content and delivery? Would you/how would you address differing viewpoints on your topic while balancing your own views?

Part 3: Analyze and Apply

Lines can often be blurred between environmental education and our own personal advocacy and activism – it's easy to do when you are passionate about what you do! While each has its appropriate time and place, as professional environmental educators, it is up to us to strike a balance between our personal views and providing a thorough representation of the topic at hand. Acknowledging that there can be multiple views, perspectives, and histories surrounding your topic only makes your educational efforts more meaningful.

To delve deeper, imagine you are giving advice to the to the educators listed in the scenarios provided as they balance their personal views and beliefs within their work environment. Choose two scenarios and fill out the table that asks you to list things to do, avoid (don't do), different perspectives to consider besides the personal view, and resources to use to address those perspectives (websites, books, etc.).

Part 4: Let's Get Creative!

Get those creative juices going! Choose an environmental topic that you are personally passionate about and create an environmental education bumper sticker that conveys your message. We will share these during the group discussion, but they need to be uploaded by 4/19 via Google Classroom. Create your own or use the template provided.

Two Hats

John Hug

It would appear that environmental educators have a bad case of the "two hat" problem. We have come by the problem naturally and, therefore, we have paid little attention to it

The problem is simply that industry, utilities, labor, business, media and other segments of the population and the general public have consistently recognized only one hat when talking about environmentalists and environmental educators. It is not uncommon for dedicated environmental educators to be summarily dismissed as troublemakers - environmentalists. This one hat view is easily explained because environmental educators are almost always environmentalists. Perhaps definitions will help clarify the problem.

Any world citizen who advocates with greater or lesser action that wrongs against our environment must be stopped is an environmentalist. Perhaps the negative reputation environmentalists have stems from the dramatic and radical actions of a few.

An environmental educator, on the other hand, is any world citizen who uses information and educational processes to help people analyze the merits of the many and varied points of view usually present on a given environmental issue. The environmental educator is not the "mediator," "trade-off specialist" or "negotiator," but a developer of skills and an information analyst who prepares the people (from any segment of the population) who will participate in environmental decision making.

Environmental educators, therefore, need to be as "value fair" or "value free" as they can when working in this role. They must scrupulously strive to get all the facts, examine and illuminate all the viewpoints, and keep from letting their own particular position (as an environmentalist) from mixing with their educator role.

My suggestion is simply that environmental educators make an effort to clarify the two distinct roles. At every opportunity, we should emphasize the neutral nature of environmental education activity. Strong advocates are all around us, each using the techniques of persuasion and propaganda to build their constituencies. We must, ourselves, be familiar with all sides, stand firm for each advocate's right to be heard, and provide a rational stage for informed debate.

Environmental educators have the right and the duty to be environmentalists, but the dual roles must adhere to the original premise - to keep each hat on its proper head, while utilizing to the fullest the professional skills of the environmental educators.

||||

Originally in Aldrich, James L., Blackburn, A-M., & George, A. A. (Eds.) (1977). *The Report of the North American Regional Seminar on Environmental Education for the Red World*. Columbus, OH: SMEAC Information Reference Center.



Beyond Ecophobia

by David Sobel

If we want children to flourish, says educator David Sobel, we need to give them time to connect with nature and love the Earth before we ask them to save it.

Just as ethnobotanists are descending on tropical forests in search of new plants for medical uses, environmental educators, parents, and teachers are descending on second and third graders to teach them about the rainforests. From Brattleboro, Vermont, to Berkeley, California, school children are learning about tapirs, poison arrow frogs, and biodiversity. They hear the story of the murder of activist Chico Mendez and watch videos about the plight of indigenous forest people displaced by logging and exploration for oil. They learn that between the end of morning recess and the beginning of lunch, more than 10,000 acres of rainforest will be cut down, making way for fast food “hamburgerable” cattle.

The motive for all this is honorable and just, but what's emerging is a strange kind of schizophrenia. Children are disconnected from the world outside their doors and connected with endangered animals and ecosystems around the globe through electronic media.

What really happens when we lay the weight of the world's environmental problems on eight and nine year-olds already haunted with too many concerns and not enough real contact with nature?

The crux of the issue is the developmental appropriateness of environmental curricula. One problem we have in schools is premature abstraction – we teach too abstractly, too early. Mathematics educators have recently realized that premature abstraction was one of the major causes of math phobia among children in the primary grades. Unable to connect the signs and symbols on the paper with the real world, many children were turning off to math. Mathematics instruction has been reinvigorated in the last two decades through the use of concrete materials (such as cuisinaire rods, fraction bars, and Unifix cubes) and the grounding of math instruction in the stuff and problems of everyday life. The result has been the turning of the tide against math phobia.

Perhaps to be replaced by ecophobia – a fear of ecological problems and the natural world. Fear of oil spills, rainforest destruction, whale hunting, acid rain, the ozone hole, and Lyme disease. Fear of just being outside. If we prematurely ask children to deal with problems beyond their understanding and control, then I think we cut them off from the possible sources of their strength.

In response to physical and sexual abuse, children learn distancing techniques, ways to cut themselves off from the pain. My fear is that our environmentally correct curriculum will end up distancing children from, rather than connecting them with, the natural world. The natural world is being abused, and they just don't want to have to deal with it.

I propose that there are healthy ways to foster environmentally aware, empowered students. We can cure the malaise of ecophobia with ecophilia –supporting children's biological tendency to bond with the natural world.

Beyond cardboard rainforests

If curricula focused on saving the Earth don't work, what does? One way to find the answer is to figure out what contributes to the development of environmental values in adults. What happened in the childhoods of environmentalists to make them grow up with strong ecological values? A handful of studies like this have been conducted, and when Louise Chawla of Kentucky State University reviewed them for her article, “Children's Concern for the Natural Environment” in *Children's Environment Quarterly*, she found a striking pattern. Most environmentalists attributed their commitment to a combination of two sources: “many hours spent outdoors in a keenly remembered wild or semi-wild place in childhood or adolescence, and an adult who taught respect for nature.” Not one of the conservationists surveyed explained his or her dedication as a reaction against exposure to an ugly environment.

What a simple solution. No rainforest curriculum, no environmental action, just opportunities to be in the natural world with modeling by a responsible adult.

The child's expanding world

The formative years of bonding with the Earth include three stages of development that should be of primary concern to parents and teachers: early childhood from ages four to seven, the elementary years from eight to eleven, and early adolescence from 12 to 15. Though these age frames need to be considered flexibly, my belief is that environmental education should have a different tenor and style during each of these stages.

Over the past 10 years, I have collected neighborhood maps from hundreds of children in the US, England, and the Caribbean. Through analyzing these maps and doing interviews and field trips with these same children, I have found clear patterns of development in the relationship between the child and his or her expanding world.

From ages four to seven, children's homes fill the center of their maps, and much of their play is within sight or earshot of the home. Children often describe the worms,

chipmunks, and pigeons that live in their yards or on their blocks, and they feel protective of these creatures.

From eight to eleven, children's geographical ranges expand rapidly. Their maps push off the edge of the page, and they often need to attach extra pieces of paper to map the new terrain they are investigating. Children's homes become small, inconsequential, and often move to the periphery of the map. The central focus in their maps is the “explorable landscape.”

From 12 to 15, the maps continue to expand in scope and become more abstract, but the favored places often move out of the woods and into town. Social gathering places such as the mall, the downtown luncheonette, and the town park take on new significance.

At each of these stages, children desire immersion, solitude, and interaction in a close, knowable world. We take children away from these strength-giving landscapes when we ask them to deal with distant ecosystems and environmental problems. Rather, we should be attempting to engage children more deeply in knowing the flora, fauna, and character of their own local places. The woods behind the school and the neighborhood streets and stores are the places to start.

How do we translate these notions into guidelines for environmental education? I propose three phases of environmental curricula during the elementary and middle school years. In early childhood, activities should center on enhancing the developmental tendency toward empathy with the natural world. In middle childhood, exploration should take precedence. And in early adolescence, social action should assume a more central role.

Empathy: finding animal allies

Empathy between the child and the natural world should be a main objective for children ages four through seven. As children begin their forays into the natural world, we can encourage feelings for the creatures living there. Early childhood is characterized by a lack of differentiation between the self and the other. Children feel implicitly drawn to baby animals; a child feels pain when someone else scrapes her knee. Rather than force separateness, we want to cultivate that sense of connectedness so that it can become the emotional foundation for the more abstract ecological concept that everything is connected to everything else. Stories, songs, moving like animals, celebrating seasons, and fostering Rachel Carson's “sense of wonder” should be primary activities during this stage.

Cultivating relationships with animals, both real and imagined, is one of the best ways to foster empathy during early childhood. Children want to run like deer, to slither along the ground like snakes, to be clever as a fox and quick like a bunny. There's no need for endangered species here – there are more than enough common, everyday

species to fill the lives of children. And the environmentally correct notion of not anthropomorphizing animals can be thrown out the window.

Paul Shepard, in *The Arc of the Mind*, says: “Animals have a magnetic affinity for the child, for each in its way seems to embody some impulse, reaction, or movement that is ‘like me.’ In the playful, controlled enactment of them comes a gradual mastery of the personal inner zoology of fears, joys, and relationships. In the stories told, their forms spring to life in the mind, re-presented in consciousness, training the capacity to imagine.”

With this conviction in mind, a group of colleagues and I conducted the following activities with preschool children in Peterborough, New Hampshire, and with second graders at Camp Waubenong in Brattleboro, Vermont.

We initiated our bird curriculum planning at Camp Waubenong by agreeing that we wouldn't have the children identify birds from fleeting glimpses and then look them up in books to start. Boring! Rather, we speculated on what it is about birds that appeals to children. The answer was obvious: they fly, and they make nests. Applying the developmental principle that children like to become things rather than objectify them in early childhood, we came up with our plan.

We gathered a bunch of large refrigerator boxes, cut them into sheets, and had the children lie down on top of them, on their backs with arms outstretched. Starting at the neck, we traced around the children, but instead of following along the underside of the arm, we drew a straight line from their wrists to their waists, then down on both sides to about the knees. The children then stood up, we cut out the shape, and voila! Each child had an individualized set of wings. We strapped them on, made it clear that the children were not to try the wings out by jumping off roofs, and they were off. A flock of birds leaped into action, flying through the forests, exploring life as birds.

We made it to the meadow where hay had recently been cut and said, “If we're birds, we need nests.” And so we made child-sized nests. Many hours of dramatic play followed.

A few days later, we said, “You all make great birds, but we noticed that you're all brown, and only some of the birds we see around here are brown, but some of them have lots of colors. What are some of the color patterns on the birds?”

Children described some birds they had seen, but we didn't make a point of teaching names. Instead, we pulled out the paints so they could paint their wings. More bird games followed.

By the next day, children started to notice the birds around camp. “Hey, that's the same bird as me, that's the color pattern on my wings.” Then the bird books came out. Soon, we had children poring over bird books trying to identify what kinds of birds they were and learn what they ate. Because we had started at their level of

developmental fascination, had facilitated empathy through their participation in bird consciousness, we prepared them to objectify and enter the more cognitive realm of bird knowledge.

Storyteller Brenda Peterson reminds us that, “By telling their own animal stories, children are practicing ecology at its most profound and healing level. Story as ecology – it's so simple, something we've forgotten. In our environmental wars, the emphasis has been on saving species, not becoming them.” And so we must begin in empathy, by becoming the animals before we can save them.

Exploration: teaching the landscape

Exploring the nearby world and knowing your place should be a primary objective for the “bonding with the Earth” stage, from ages eight to eleven. The curriculum can mirror the expanding scope of the child's significant world, focusing first on the surroundings of the home and school, then the neighborhood, the community, the region, and beyond. Making forts, creating small imaginary worlds, hunting and gathering, searching for treasures, following streams and pathways, exploring the landscape, taking care of animals, gardening and shaping the Earth can be primary activities during this stage.

Forts and dens, these special places of childhood that are both found and built, appear to be crucially important for many children from ages eight to eleven. Children in urban, suburban, and rural landscapes find and create hidden places, even in daunting circumstances.

These new homes in the wild, and the journeys of discovering them, are the basis for bonding with the natural world. We need to cultivate a sensitivity to this developmental geography of childhood. Appropriate curriculum at this age will capitalize on the child's innate drive to explore the nearby world.

For example, appropriate environmental education about the water cycle can start by engaging children with running water. Many children who can recite the water cycle verbally still draw maps that have streams running uphill. The challenge for the teacher is to find ways to engage students in stream walking and stream studies.

David Millstone, a fifth grade teacher in Norwich, Vermont, organized an expedition with his class in which they would follow a stream, not knowing where the stream would lead them. In a student-produced newspaper about this expedition, one child wrote:

The Deep, Dark Dungeon

“I can't see five feet,” I thought to myself. We were walking through a giant culvert

following this stream that runs behind the school and through the Nature Area.

“Watch out, dripping water,” Mr. Millstone warned us. I finally realized what is beyond the steel grates that you see along the street. I looked up it and saw the grate 20 feet above me. The culvert seemed to be moving. I think we took a turn somewhere.

“The end,” someone shouted. ... I had to walk with my feet widely apart. We got out alive, had a snack, and continued on our adventure.”

Millstone describes his motives: “The trip expanded our recent emphasis on mapping our neighborhoods.

The search challenged the class's map-making skills; similarly, an adventure into the unknown stimulated the children's writing. ... The experience of following a stream would reinforce a fundamental concept in topographic maps – water flows downhill. ... I wanted the children to experience the thrill of posing a question and working directly to find the answer. And, not least of all, I thought this trip would be fun.”

The children's writing for the class newsletter crackles with excitement over discovering something literally in their backyard. And notice that the project doesn't touch directly on acid rain or groundwater pollution or drinking water quality or evaporation and condensation. It does, however, immerse children in the primary experience of exploring streams and understanding where they go. Wet sneakers and muddy clothes are prerequisites for understanding the water cycle.

Social action: saving the neighborhood

Social action appropriately begins around age 12 and certainly extends beyond age 15. While woods, parks, and playgrounds are the landscapes of middle childhood, adolescents want to be downtown. As children start to discover the “self” of adolescence and feel their connectedness to society, they naturally incline toward wanting to save the world. Managing school recycling programs, passing town ordinances, testifying at hearings, planning and going on school expeditions are all appropriate activities at this point.

An article in the March/April 1989 issue of *Sierra* relates how a group of sixth graders in Salt Lake City, Utah, became concerned when they noticed that a map of hazardous waste sites in the city included a location just three blocks from their school.

“That old barrel yard?” 11 year-old Maxine asked. “Kids climb all over those barrels.”

When classroom teacher Barbara Lewis contacted the Department of Health, she was told that “there's nothing children can do; they'll be in high school before they see any results.” The students were compelled to act. They contacted the EPA, the owner of the barrel yard, and the mayor. They studied literature on hazardous waste and the

problems involved in cleaning it up. They attracted reporters intrigued with the children's persistence. And, after a year and a half, they not only witnessed the removal of the 50,000 barrels and the beginnings of the EPA clean up, but they wrote legislation, lobbied legislators, and saw the passage of a Utah state law that set up a hazardous waste clean up fund.

Allowing time for nature

Suffering from the timesickness of trying to do too much too quickly, we infect our children with our impatience. Most nature study or environmental education in American elementary schools lasts a matter of weeks, maybe a month. As a result, depth is sacrificed for breadth, and there's little opportunity for immersion in the landscape. Instead, we make children do workbooks in kindergarten, we let seven year-olds watch Jurassic Park, and we bombard them with tragic anxiety.

Jo Anne Kruschak, a first and second grade teacher in Vermont spent all of last year doing a project on a local beaver pond and marsh. These first and second graders visited the pond, about a quarter mile from the school, once a week through all kinds of weather.

“In the beginning,” Kruschak recalls, “I thought we'd run out of things to do and study by Thanksgiving. By March I realized that there was no way we could follow up on all the neat opportunities by the end of the year.”

If we want children to flourish, to become truly empowered, then let us allow them to love the Earth before we ask them to save it. Perhaps this is what Thoreau had in mind when he said, “the more slowly trees grow at first, the sounder they are at the core, and I think the same is true of human beings.”

Adapted from volume one of the Orion Society Nature Literacy Series, Beyond Ecophobia: Reclaiming the Heart in Nature Education. To obtain a copy, contact the Orion Society at 195 Main St., Great Barrington, MA 01230; 413/528-4422; E-mail: orion@orionsociety.org;

Web: www.orionsociety.org

David Sobel is director of the teacher certification program at Antioch New England Graduate School, and author of Children's Special Places (Zephyr Press, 1993).

Environmental Education

Should Action Be A Goal? No

By Jo Kwong

What should be the role, if any, of "public action" or "activism" in environmental education? This question hits at the heart of the "great divide" on environmental education perspectives. So called critics of environmental education (I, apparently, am one) have decidedly different ideas about the behavioral and action components than do many full-time environmental educators.

Generally speaking, environmental education or EE is an interdisciplinary process with the goal of equipping people with the knowledge, attitudes, skills, and motivation they need to help resolve environmental issues. As two EE experts, John Disinger and Martha Monroe, have pointed out, environmental education is "at odds with traditional educational practice" (Disinger and Monroe, p. 7). It is more than education. It's about effecting behavioral change. This aspect is the source of endless controversy in the EE community.

The emphasis on values and attitudes stems from the EE community's frustration with environmental inaction by today's citizens. Research suggests that despite twenty or so years of environmental awareness and education, people have not substantially changed their value systems. This has led some educators to believe that since knowledge alone will not foster responsible behavior towards the environment, they must change people's values and attitudes. More and more, environmental literacy is defined not by knowledge, but by observable behaviors (Roth, Ch. 2). This is simply going too far in my perspective. We're getting into the very area that I am uncomfortable with. I agree that children should be taught about the environment starting from a young age, and it should be an ongoing, integrated process in their formal and informal education. But I do believe that proper education in the traditional sense provides a sufficient basis for developing sound and acceptable human beings. I support an educational system that fosters a diversity of values, not only in the classroom, but in our communities as well. Such diversity allows for the greatest exploration of solutions to problems. Few problems have only one "right" solution. If a discipline comes with its own set of values, how do we decide whose values are to be taught? What should parents do if they disagree with the selected values?

Perhaps this gets at the crux of the controversy. As one colleague said to me, "We were so-called traditionally educated and look what it got us. A grossly polluted environment." But that may simply be another way of saying, "We don't like the choices people have made and we'd like to ensure that future generations don't have that range of choices to make." I'm not arguing that we've done a perfect job in preserving and protecting the environment, but people have generally done the best they could with the knowledge they had. Their choices may not be the ones that environmental educators wish had been made. Yet I would argue that the school system is not the place to wage this battle! The market system in which consumers choose goods and services and the democratic system in which voters choose to support or reject laws, regulations or candidates, offer far better opportunities.

Some colleagues insist that an emphasis on values, skills, and behavior is needed to teach such citizenship skills. But why do we need an entire environmental education discipline to teach citizenship skills? Isn't there enough substance to teach without the overwhelming focus on behavioral changes and action? And there is no shortage of civics teaching in the grade schools.

Now, the EE behaviorists may contend that it's not specific behavioral changes, but simply the intellectual and psychological psyche, that is being pursued. Here again, I disagree. Let me use the example of recycling.

Starting with the very first crop of pre-school children, songs are sung, dances are danced, and games are played--all to the tune of recycling. But most young kids seem to think recycling means putting paper in the recycling bin or toting newspapers to the curb for pick up. The recycled stuff disappears and is no longer their concern. I personally had a hard time broadening my kids' understanding of recycling. When their first grade teacher gave them the assignment to create an object from a recyclable material, I reminded them that we're not doing the environment any favor by recycling just to create things for the act of recycling. We have to use what we recycle! My kids wanted me to discard the milk out of the carton so they could use the container. That's recycling?

Children are learning a behavior--to look for a recycling bin rather than a trash can--but they don't necessarily understand the broader context. Another example came up at an environmental conference for congressional staffers. When the topic of letter-writing campaigns came up, a round of chuckles and smiles flowed around the room as each shared their stories of receiving buckets of identical letters. How broad was the knowledge base and how narrow was the range of acceptable behaviors?

At a conference for environmental educators sponsored by the Virginia Department of Environmental Quality, I was pleased to see a session on critical thinking that offered a multi step process for getting high school students kids to look at all perspectives of a problem. How disappointed I was to work through the process, however, and see the very directed and limited range of thinking. The teacher proposed the hypothesis: "Overpopulation is the source of all environmental problems." Her perspective was quite clear, so I asked her if she would have accepted well-reasoned arguments contrary to her position. Thinking that I could not possibly disagree with her view that overpopulation is the root of all problems, she responded, "Of course, I'd never let them get that far. I'd control them with the books they'd be allowed to read."

Already, I hear the screams of "Anecdotal!" coming from those that disagree with me. Nonetheless, my point is that the emphasis on behavior, while perhaps well-intended and laudable if properly executed, can easily be misused.

Environmental education is valuable and necessary. Starting from a very young age, children should be taught about the environment that surrounds them. As they grow, their environmental backyard and awareness should grow. Their education should be sequential and integrated with core disciplines. In addition to a sound knowledge base, students should be taught critical thinking skills and recognize that they have the right to act on their beliefs if they so choose. But environmental education should be education, not advocacy. Their action and behavior should not be a dictate handed down by a ruling establishment. Such is the privilege of living in a free

society.

References

Disinger, John F., and Martha Monroe. 1994. "Defining Environmental Education." *EE Toolbox*. Ann Arbor: National Consortium for Environmental Education and Training.

Roth, Charles E. 1992. *Environmental Literacy: Its Roots, Evolution and Directions in the 1990s*, rev. ed. Columbus, OH: ERIC Clearinghouse for Science, Mathematics, and Environmental Education.

Author

Jo Kwong is an Environmental Research Associate with the Atlas Economic Research Foundation in Fairfax, Virginia, and a former PERC Fellow. She is coauthor of *Environmental Education* (London: Institute of Economic Affairs).

Environmental Education

Should Action Be A Goal? Yes

By Richard Wilke

Responsible and informed action has been a goal of environmental education since the first definitions of this field emerged nearly thirty years ago. More recent definitions continue to emphasize the central role of responsible action.

The 1996 *Report Assessing Environmental Education in the United States* prepared for Congress by the National Environmental Education Advisory Council defines environmental education as:

a learning process that increases people's knowledge and awareness about the environment and associated challenges, develops the necessary skills and expertise to address these challenges, and fosters attitudes, motivations, and commitments to make informed decisions and take responsible action. (p. 1)

An emphasis on personal and social decision making is not unique to environmental education. The *National Science Education Standards* published in 1996 by the National Research Council include four goals for science education, two of which pertain to this discussion. Students should be able to:

1. use appropriate scientific processes and principles in making personal decisions
2. engage intelligently in public discourse and debate about matters of scientific and technological concern. (p. 13)

Thus, personal and social decision making are seen as ultimate goals of environmental education and science education as well as several other fields of education.

Critics of the role of citizenship action in environmental education often claim that environmental educators are "activists [who] indoctrinate children, who in turn 'educate' their parents and the public" (Grigg, p. 45). Admittedly, there are examples of teachers who practice advocacy rather than education. Fortunately, they are the exception rather than the rule.

There is a proper place for citizen action in the environmental education curriculum. The sequence of instruction should end with citizen action and it should be an option, not a requirement. The *Environmental Education Guidelines for Excellence: What School-Age Learners Should Know and Be Able to Do*, prepared by the North American Association for Environmental Education (NAAEE) is organized around four themes. The themes are:

1. Knowledge of environmental processes and systems
2. Inquiry skills
3. Skills for decision and action
4. Personal and civic responsibility

In describing the fourth theme, the guidelines state:

Environmental literacy goes beyond possessing knowledge and skills, since even well honed skills for taking action cannot have an effect unless they are used. During the years of their formal education, learners develop the inclination to put their knowledge and skills to work, acting on their own conclusions about what should be done to ensure environmental quality.

Environmental education aims to foster in learners a sense of their own efficacy--a confidence that they have the ability to inquire, learn, analyze, decide, communicate and participate. Through the learning process, students become independent and responsible thinkers and actors. Students learn that they control their own success or failure, and they grow in the knowledge that their actions can make a difference.

Environmentally literate persons possess a strong sense of citizenship. They understand the role of citizens in a democracy, and accept their part with responsibility and commitment. During their school years, learners grow into the role of citizen, developing the personal and civic insight and traits that motivate action. Cultivating their own environmental and social ethic helps learners make difficult decisions and accept personal responsibility for those choices. (p. 14-15)

State guidelines for curriculum planning in environmental education commonly address how citizen action should be incorporated in the curriculum. Wisconsin's curriculum model for environmental education, which is typical of others, emphasizes "perceptual awareness" and "knowledge" as prerequisites for instruction on citizen action. Citizen action is the focus near the end of the K-12 curriculum, not at the beginning (p. 76). Research results from a random sample of over 3,500 Wisconsin students (Champeau, p. 6) indicate that "students believe environmental problems can be prevented and solved and feel they have a personal responsibility to help prevent and solve environmental problems." There are good examples of environmental education curriculum materials that develop students' investigation, evaluation and action skills. Perhaps the best is *Investigating and Evaluating Environmental Issues and Actions* (Hungerford et al.). It has received awards from the National Science Teachers Association and it was selected by the U.S. Department of Education for dissemination through the National Diffusion Network. One component of this program, entitled "Action Analysis Criteria," includes fourteen questions that should be asked before anyone proceeds with an environmental action.

1. Is there *sufficient evidence* to warrant action on this issue?
2. Are there *alternative actions* available for use? What are they?
3. Is the action chosen the most *effective* one available?
4. Are there *legal consequences* of this action? If so, what are they?
5. Will there be *social consequences* of this action? If so, what are they? 6. Will there be *economic consequences* of this action? If so, what are they? 7. What are the *ecological consequences* of this action?
8. Do my *personal values* support this action?
9. Do I understand the *beliefs and values of others* who are involved in this issue?
10. Do I understand the *procedures* necessary to take this action?
11. Do I have the *skills* needed to complete this action?
12. Do I have the *courage* to take this action?

13. Do I have the *time* needed to complete this action?
14. Do I have all the *other resources* (other than the above) needed to make this action effective?

Students who become involved in citizen action after addressing these fourteen questions are practicing environmental education action, not environmental advocacy.

In conclusion, there is a need for instruction in environmental education action in the K-12 classroom. The instruction should come from teachers trained in environmental education. In contrast, teachers who promote their own perspective and define the course of action for their students do an injustice both to their students and to the field of environmental education.

References

Champeau, R. 1997. *Environmental Education in Wisconsin: Are We Walking the Talk?* Stevens Point, WI: Wisconsin Center for Environmental Education.

Grigg, W. 1993. Globalist Children's Crusade. *New American* (Fall): 44-47.

Hungerford, H., R. Litherland, R. Peyton, J. Ramsey, and T. Volk. 1992. *Investigating and Evaluating Environmental Issues and Actions: Skill Development Modules*. Champaign, IL: Stipes Publishing.

NAAEE. 1997. *Environmental Education Guidelines for Excellence: What School Age Children Should Know and Be Able to Do*. Troy, OH, Draft, April.

National Environmental Education Advisory Council. 1996. *Report Assessing Environmental Education in the United States and the Implementation of the National Environmental Education Act of 1990*. Washington, DC: U.S. Environmental Protection Agency, Environmental Education Division, December.

National Research Council. 1996. *National Science Education Standards*. Washington, DC: National Academy Press.

Wisconsin Department of Public Instruction. 1994. *A Guide to Curriculum Planning in Environmental Education*. Madison, WI. National Environmental Education Advisory Council. 1996. *Report Assessing Environmental Education in the United States and the Implementation of the National Environmental Education Act of 1990*. Washington, DC: U.S. Environmental Protection Agency, Environmental Education Division, December.

Author

Richard Wilke is Associate Dean of the College of Natural Resources at the University of Wisconsin-Stevens Point and University of Wisconsin System Distinguished Professor of Environmental Education. He is past president of the NAAEE.

Submit your proposal by 14 April!

AGU.ORG/FALL-MEETING

HELP SHAPE THE
SCIENCE & SOCIETY
DISCUSSION DURING #AGU21



ADVERTISEMENT

Voice of the Earth and Space Science Community

AGU ADVANCED
EARTH AND
SPACE SCIENCE
Blogosphere

(<https://blogs.agu.org>)



<https://blogs.agu.org/geoedtrek>

JULY 19, 2017

Advocacy and Activism – what they mean, why they matter

(<https://blogs.agu.org/geoedtrek/2017/07/19/advocacy-and-activism/>)

Posted by [Laura Guertin](https://blogs.agu.org/geoedtrek/author/drlauraquertin/) (<https://blogs.agu.org/geoedtrek/author/drlauraquertin/>)

11

Recently, I attended a conference on sustainability in higher education. There was a session at the conference titled “Activism in the Academy” that had a room filled to capacity with participants eager to share their stories and viewpoints on the subject. What we quickly realized is that although we were all speaking about the same general topic, we were interchanging our vocabulary and not working from a common set of definitions.

The online Merriam-Webster Dictionary defines the two terms as follows:

Advocacy (<https://www.merriam-webster.com/dictionary/advocacy>) – the act or process of supporting a cause or proposal

Activism (<https://www.merriam-webster.com/dictionary/activism>) – a doctrine or practice that emphasizes direct vigorous action especially in support of or opposition to one side of a controversial issue

**Interestingly, “advocacy” is currently in the top 20% of words looked up on their website, and “activism” is in the bottom 40% of searched words.*

An advocate is someone like The Lorax, who speaks on behalf of a person, group or an organization (in this case, The Lorax speaks for the trees). An activist is someone that takes intentional action to bring about change, typically social or political.

Where do scientists fit in to all of this? Is being an advocate or activist good or bad? Can/should scientists speak up and get involved? Parson (2016) published an article in *Frontiers in Marine Science* titled “Advocacy and Activism Are Not Dirty Words—How Activists Can Better Help Conservation Scientists” (<http://journal.frontiersin.org/article/10.3389/fmars.2016.00229/full>). Meyers et al. (2010) echos the benefits of science-based advocacy in *Above the din but in the fray: environmental scientists as effective advocates* (<http://onlinelibrary.wiley.com/store/10.1890/090143/asset/fee201086299.pdf;jsessionid=716028A855CFF3AD1B3DE156561C79AE.f01t03?v=1&t=j5bcx0fv&s=aa60f1fd6ed0cad8725a3d0bdd5fc66a90faeb91>). These articles are just a couple of examples of the many surveys and studies on science, advocacy and activism.

Both scientists and the public overwhelmingly say it is appropriate for scientists to become active in political debates about such issues as nuclear power or stem cell research. Virtually all scientists (97%) endorse their participation in debates about these issues, while 76% of the public agrees. — Pew Research Center (2009) (<http://www.peoplepress.org/2009/07/09/public-praises-science-scientists-fault-public-media/>) (2009) (<http://www.people-press.org/2009/07/09/public-praises-science-scientists-fault-public-media/>)

For those concerned about professional repercussions for entering the advocacy/activism arena, “our results show that climate scientists who wish to engage in certain forms of advocacy have considerable latitude to do so without risking harm to their credibility, or the credibility of the scientific community” (see Kotcher et al., 2017 (<http://www.tandfonline.com/doi/full/10.1080/17524032.2016.1275736>)). Crawford et al. (2016) (<http://www.tandfonline.com/doi/abs/10.1080/10871209.2016.1149747?journalCode=uhdw20>) surveyed wildlife and natural resource students and professionals and found disagreement about what actions constitute advocacy and what roles are acceptable for scientists, but agreement that scientists should engage in advocacy to influence policy.

Certainly, many scientists are either at the edge of the water or fully jumping in to being advocates for science. Whether it was participating in the [March for Science](https://blogs.agu.org/geoedtrek/2017/04/12/march-science-will-wont/) (<https://blogs.agu.org/geoedtrek/2017/04/12/march-science-will-wont/>) or calling the office of local legislators, or even [helping students advocate for the Earth](https://blogs.agu.org/geoedtrek/2017/04/20/helping-students-advocate-earth-integrate/) (<https://blogs.agu.org/geoedtrek/2017/04/20/helping-students-advocate-earth-integrate/>), scientists are finding a pathway and comfort level with their own engagement level. Organizations such as [500 Women Scientists](https://500womenscientists.org/) (<https://500womenscientists.org/>) at the [Union of Concerned Scientists](http://www.ucsusa.org/) (<http://www.ucsusa.org/>) are hosting advocacy days and webinars to help scientists become more involved. And AGU is certainly active on this front (see the resources on the [Science Is Essential](http://sciencepolicy.agu.org/scienceisessential/) (<http://sciencepolicy.agu.org/scienceisessential/>) section of the AGU website).

When I ask my students if they speak up for a cause or something they strongly believe in, many will say they don't think their voice matters or that they can make a difference. I encourage you to show those students (and friends, neighbors, family members, etc.) this video of what a 13-year-old girl did with a toy company and an Easy Bake Oven... despite the obstacles, despite how “haters gonna hate.”

Environmental Education and Environmental Advocacy: Revisited

Article in *The Journal of Environmental Education* · January 2003

DOI: 10.1080/00958960309603496



Bob Jickling

Lakehead University Thunder Bay Campus

CITATIONS

95

READS 819

1 author:

72 PUBLICATIONS 2,745 CITATIONS

SEE PROFILE

Some of the authors of this publication are also working on these related projects:



Wild Pedagogies: Touchstones for Re-Negotiating Education and the Environment in the Anthropocene [View project](#)



Re-thinking environmental education from an arts & ethics perspective [View project](#)

Environmental Education and Environmental Advocacy: Revisited

BOB JICKLING

ABSTRACT: Environmental education and environmental advocacy have a contentious relationship. In this article, the author argues that there will always be uncertainty about educationally appropriate responses to controversial issues. Although uncertainty is inherent in this task, the choices are not dichotomous. The author also argues that education suggests a fluidity of meaning that shifts across a range of contexts, and what needs to be done will be found on a case-by-case and context-by-context basis in a mediated and negotiated third space. Some tentative guideposts are offered.

Key words: environmental education, environmental advocacy, educational values, teaching practice

T

he relationship between education and advocacy is a stormy one, as can be seen in the many formulations of and disagreements about this subject that have appeared in the *Environmental Communicator's* op-ed pages. This is as it should be; a single, incontrovertible truth has not yet appeared about such issues. As Canadian philosopher John Ralston Saul (1995) notes, the examined life—in our case the life of environmental educators—makes a virtue of uncertainty and celebrates doubt.

Although doubt can be a virtue, confusion can be debilitating. If environmental educators are, as Clifford Knapp (1999) suggested, a confused and splintered group, then we are at the mercy of our critics. In this article, I respond to Knapp's thoughtful plea that we all participate in this discussion about education and advocacy. I do not attempt to remove doubt from our practice but rather reply to some of Knapp's questions, raise questions of my own, and provide

educator navigating the controversies inherent in our work. In particular, I want to

some tentative guideposts for the

educators take strong ethical positions when teaching about the obvious dangers facing the world's ecosystems?" (1999, p. 19).

I first explored such issues in a paper presented at the 1988 conference of the North American Association for Environmental Education (Jickling, 1991). However, challenges by Knapp and others, the passage of time, and the emergence of new ideas led me to revisit this topic. Events in my early professional life also contributed to my interest in these issues. As a teacher in a northern school, I had to examine my role amid a controversy about wolves and a Yukon government-sponsored wolf-kill program. I wanted my students to get involved in the issue and participate in the debate. However passionate my feelings, I was deeply troubled by a lack of philosophical guidance and curricular options; I had received little preparation for such a task. Every day I faced a classroom of individuals from different cultural backgrounds and values, whose parents in some cases supported the activities that disturbed me.

Bob Jickling is an instructor at Yukon College in Whitehorse, Yukon, Canada, and editor of the Canadian Journal of Environmental Education.

examine Knapp's question, "Why shouldn't environmental

Several years later, a research participant added to my uncertainty. Regarding the role of interest groups, he said, “How would Greenpeace, for example, fit in with environmental education?” (Jickling, 1991b, p. 176).

The problem for many education researchers is that it is unclear how “producing desired behavioral change” to achieve a “desired state” can be considered educational. “What is the role of education in the school, or Friends of Wolves, or other fanatical interest groups?” (Jickling, 1991b, p. 176). At about the same time, I was examining education and its role in preparing thoughtful and critical citizens, including the work of education philosopher R. S. Peters, who suggested that it would be unreasonable “to deprive anyone of access in an arbitrary way to forms of understanding which might throw light on alternatives open to him” (1973, p. 256).

With this background, I began to ponder various questions: What if environmental thinking needs to transcend the boundaries of conventional thinking—needs to encounter more radical ideas? How do we enable our students to push beyond the bounds of our own best thinking or the conventional wisdom of the day? How do we ensure that they can be exposed to additional alternatives?

Distinctions

In my own first attempts to understand differences between education and environmental advocacy, I sought to distinguish between education on one hand and training and more doctrinaire activities on the other (Jickling, 1991a, 1992). Distinctions can identify a range of possibilities and illustrate difficulties. In this sense, some of the more blatant cases of misplaced advocacy can be identified. Like other concepts, advocacy does not exist as a clear concept with a fixed meaning but occurs in various shades. However, strong advocacy is often associated with increasingly forceful pleas for a case, direction, or ideologically grounded position.

Much early work in environmental education was couched in terms of observable problems such as environmental planning, pesticide use, community blight, air and water pollution, traffic congestion, and so on (Stapp et al., 1969). Eliciting action on these and other issues seemed to define much of the agenda. Often the desired outcome was expressed as producing informed and skilled citizens willing and able to take action to resolve environmental issues or promoting the acquisition of responsible environmental behavior (e.g., Hungerford, Peyton, & Wilkie, 1980; Sia, Hungerford, & Tomera, 1985–1986).

Common responses to this agenda suggest instrumental and behaviorist predilections. For example,

While the pathway represented in the model by knowledge, skills, and personality factors is the more desirable pathway to encourage environmentally responsible behavior, it may be more efficacious, in the case of certain environmental problems, to manipulate situational factors in order to produce desired behavioral changes (Hines, Hungerford, &

It was not always clear how responsible behaviors were determined, although in some cases they were defined by reference to Sierra Club membership or similar activist organizations (Sia et al., 1985–1986).

Such discourse suggests a type of training in which skills are perfected through repetition and practice and are minimally involved with understanding; the aims are intent on producing a desired end.

From another perspective, however, Milton McClaren has argued the following:

Any careful reading of the materials published by Hungerford and his colleagues (for example Hungerford and Volk, 1990) will reveal that while there is an emphasis on learning outcomes and objectives, sometimes termed by these authors as “behaviours”, their methods of attaining behavioural change are far removed from the classical protocols of behaviourism (1997, p. 38).

Participants in this research group bristle at suggestions that they are involved in behavior modification. Their responses support the idea that distinctions between education and training are much fuzzier now than when I first analyzed them more than a decade ago. Although the distinctions made at that time created a more receptive environment for alternative research assumptions, it may be useful to return to the ambiguities inherent in this debate.

To be fair, my original critiques, and hence the basis for my own reexaminations, were grounded in literature that is now more than two decades old in some cases. This literature establishes a context for me to proceed, which is why these references are mentioned here. In the intervening years, the work of cited authors has changed as well (see, e.g., Cheak, Volk, & Hungerford, 2002 and their attention to qualitative methodologies).

Another distinction has been made between education and more prescriptive activities (Jickling, 1992; Jickling & Spork, 1998). This can be seen in the term “education for sustainable development,” which captures sentiments of the World Commission on Environment and Development in *Our Common Future* (1987). In this text, common interest is defined in terms of “sustainable development.” The authors assert that the public must be persuaded or made to pursue this end and that education can contribute to this process of persuasion or coercion. Despite years of criticism, adherents of sustainable development continue to advocate this agenda as an education end. Education is still seen as a tool in the “critical endeavour of attaining a sustainable future” (Hopkins, 1998, p. 169), a tool that “should be able to cope with determining and implanting these broad guiding principles [of sustainability] at the heart of ESD [education for sustainable development]” (Hopkins, 1998, p. 172).

The principal problem with these examples is that education is presented as an instrumentalist and ideological tool; it is somehow educationally justifiable to implant in learners the guiding principles of sustainability in the service of sustainable development. When education is viewed in this way, many educators find these sentiments misrepresent

their task. They see their job as teaching students how to think, not what to think. Imagine implanting the principles of Marxism into the heart of an American education system; it would be viewed as indoctrination. The same should hold true of less overtly contentious ideologies such as sustainable development. Again there is a type of advocacy promoted that seems at odds with ideas about education.

If these approaches are at odds with ideas about education, then they will certainly be criticized. Some critics will deny or downplay environmental issues and vigorously denounce inculcation of environmentalism into the minds of young citizens (Sanera & Shaw, 1996). For me, this point of view only raises additional questions. How can an educational environment be created where students can be introduced to ideas outside of the mainstream political spectrum? How can students be equipped with the conceptual and practical tools that could enable them to move beyond the alleged standards set by world leaders? (United Nations Conference on Environment and Development, 1992; World Commission on Environment and Development, 1987). How can they have the opportunity to consider the philosophical underpinnings of Greenpeace or other so-called “radical” groups? Are they to be denied access to forms of understanding that might throw light on alternatives beyond those presently accepted?

Given these questions and concerns, it seemed important to me to distinguish between education and advocacy. Not only did I want to be able to answer critics, but I was concerned that environmental education should develop as environmental thinking continues to develop (see Weston, 1992). However, distinctions are simply devices that can be used to see an issue from alternative perspectives; they are not truths. The examples presented illustrate some problems with advocacy-oriented positions and begin to establish territory for discussion.

Education as a Value-Laden Activity

Although the education and advocacy distinction can illustrate some of the coarser problems in environmental education, it fails to recognize that education is an inherently value-laden endeavor. By itself, this distinction deals insufficiently with the nuanced realities of many practitioners.

Although many theorists have discussed the value-laden nature of education, Elliot Eisner provided a simple but effective framework for exploration. In his work describing the “three curricula that all schools teach,” Eisner (1985) argued that in addition to pursuing the explicit aims laid out for curricula, educators convey important messages through what they do in an educational setting—the implicit curriculum—and by what they leave out of their instruction—the null curriculum. When educators do not pay attention to all of these messages, they create situations that can negate their declared intentions.

For example, if we want students to participate effectively in a democracy¹ yet we run authoritarian classrooms, then our implicit curriculum works against our aims, and we

one can be readied for democratic participation in such a hostile environment. Similarly, if we believe that an environmental ethos may be grounded in qualities such as care, empathy, concern, and understanding, then we need to create contexts that can incorporate these qualities. Some speak of creating a biophilic or life-loving classroom (see Selby, 1996), yet it is hard to imagine success in contexts where children never see, touch, smell, or listen to other living beings—or in classrooms where animal dissections are commonplace. All that we do is directed by value-based choices.

There are also issues surrounding values and language. If we persistently refer to the environment as a “resource,” then we are implicitly reinforcing a human-centered perspective, a condition at odds with the emergence of new and more inclusive ethics. Again, the very words we select connote value.

The application of Eisner’s framework to early definitions of education and advocacy reveals some of the difficulties of these positions. Instrumentalists implicitly accept that environmentally responsible behavior is knowable and epitomized by advocacy group membership. What is omitted (or null) are discussions about what constitutes environmentally responsible behavior, the efficacy of advocacy groups (see, e.g., Manes, 1990), competing conceptions of education, and the educational merit of behavioral intervention strategies.

Implicit in the proposals advocating “education for sustainable development” are beliefs that the common interest is knowable and can be determined by world political leaders and that it is the job of educators to implement such a politically derived agenda. Null through omission are discussions about the inherent difficulties in the term “sustainable development,” frequently considered to be an oxymoron (Disinger, 1990; Livingston, 1994) or to disproportionate serving economic interests (see, e.g., Berryman, 1999; Sauvé, Berryman, & Brunelle, 2000). Also omitted is any consideration of the evolving or developing nature of environmental thinking (Leopold, 1949; Weston, 1992) and other perspectives such as deep ecology, ecofeminism, and bioregionalism that might provide useful challenges to sustainable development thinking. Faced with the understanding that education is not value-neutral yet discomfited by some forms of advocacy, educators may wonder what they are to do.

To resolve this dilemma, the first step is to delineate the territory. Bora Simmons (1996) argued for emphasis on the education process. In her view, students should research and evaluate issues and then decide for themselves what, if any, action is appropriate. For Simmons, education should be learner centered and student directed. Clifford Knapp (1996, 1999) responded with some interesting challenges. He pointed out that educators have always taken strong stands on many moral issues such as seeking peaceful solutions rather than violence, accepting cultural diversity rather than prejudice, and insisting on honesty rather than cheating. Thus it seems a short step to allow educators to speak in favor of environmental issues, to make their preferences

reveal much about our values. It is hard to imagine how any known in the classroom setting, and even to take strong eth

ical positions when teaching about the “obvious dangers
Jickling 23

is distinguished from indoctrination, which is not based on reason, and propaganda, which uses unethical techniques. facing the world’s ecosystems.” Knapp drove the point home with the question, “What do students learn about their teachers, if educators never take public stands on what they perceive to be critical issues and threats to our survival?” (1999, p. 19). These discrepant positions create dilemmas for educators and suggest a range of possible responses. Some responses lean toward value neutrality and value-free education practice; others favor delineating their positions, then acting on them.

Leaning Away From Advocacy Positions

Certainly the Simmons response (1996) and some of my own work (Jickling, 1991a, 1992) lean away from advocacy positions. Proponents of this point of view wish to anticipate the critics and are concerned that deeper, more philosophical questions can be minimized in a more advocacy-oriented approach. Other responses have been phrased more forcefully. Paul Zeph asserted that we must “keep environmentalism out of environmental education” (1998, p. 2); we are educators and not issue activists and as such should save our opinions on controversial issues until we are well away from the classroom.

Leaning Toward Advocacy Positions

An alternative approach is to acknowledge that education is not value-neutral and to be open about one’s position. For the Norwegian philosopher Arne Naess (Naess & Jickling, 2000), it is acceptable to pursue particular environmental goals and to invite students to do the same, but only in a certain fashion. For him, leading students in a particular direction is always qualified through use of the word “if.” “If you have,” for example, “the following value priority, then [this relevant action follows]” (p. 61). For Naess, it is very important to respect alternative positions. Although it may be appropriate to elaborate one’s own position, it is inappropriate to end with that, as the ultimate result may only clarify the position of opponents. For Naess, truth and validity must be pursued. “He would not claim an ultimate answer, but he would like to point in a direction” (Naess & Jickling, 2000, p. 62).

A poignant example comes from the Middle East where Israeli and Palestinian educators worked together on educational interventions that aimed to change public opinion in favor of peaceful coexistence (Haddad, Zuzovsky, & Yakir, 2000; Zuzovsky, 2000). In this example, the knowledge based curricula was designed to “affect the formation of desired beliefs and attitudes in favour of a peaceful solution to water scarcity and regional cooperation” (Zuzovsky, 2000, p. 215). These educators sought to modify beliefs through persuasion, a process grounded in relevant information and strong arguments. Persuasion, in their view, is considered successful when a belief or an attitude changes

on the basis of information perceived as convincing by the recipient—that is, on the basis of good reasons. Persuasion

Finally, persuasion is distinguished from coercion in that the participant is free to accept or reject an appeal. A final example can be found in John Fien’s *Education for the Environment* (1993). Fien acknowledged the inevitability of a value dimension to education and attempted to clarify for himself and others a “best possible” ideology through a red-green vision. He has then made this “desired ‘red-green’ future” the object of his educative efforts by placing it “at the heart of education for the environment” (p. 12). His approach to environmental education begins to resemble “education for a ‘red-green’” future. In his scenario, others labeled “liberal” are considered “fair minded,” yet cast as ultimately ineffectual. Those labeled “Gaianist” are judged politically naive. Although an individual’s position might change with time, perhaps tinged with a different “shade” of green, the insertion of a particular ideology into the heart of education while diminishing other approaches makes this a strong advocacy approach.²

The Tough Work of Education

The range of possibilities described earlier indicates that our decisions are tough ones. In leaning away from advocacy, educators risk implying through their programs and actions that (a) participation in controversial issues and adoption of a position are unimportant, (b) work of environmentalists should not be valued, and (c) much “radical” thinking and actions should be avoided. In some cases, it is considered sufficient to just provide information to students—environmental philosophy and politics have little to contribute to environmental education (see, e.g., Sanera, 1998a, 1998b).

Yet difficulties also await those who lean toward advocacy-oriented approaches. First, relationships of power and influence between teachers, instructors, and students may not necessarily be balanced or neutral; and students may not possess the necessary insight, knowledge, understanding, and courage to respond effectively to the persuasions of their elders. And second, some methods work on the assumption that a superior approach to environmental instruction is knowable and should be inculcated through cognitive techniques, interventionist strategies, or ideological foci.

Regarding the first point, it is interesting to observe how a group of international “experts” in environmental education were led to discuss topics such as the good practice of education for sustainable development and ideas for work programs for education for sustainable development. Interestingly, this discussion occurred although the majority of these scholars felt that education for sustainable development should be “abolished as a concept” (Hesselink, van Kempen, & Wals, 2000, p. 50). Because research, reason, and discussion can all be exploited as a justification for ideology, we should not underestimate how easily we can be led and can ourselves lead.

Surveying these difficulties, I agree with other environmental educators (Knapp, 1996; Ogle, 1999), other educa-

either—or choices. Distinctions can be useful when they enable issues to be seen in new ways and reveal unquestioned assumptions and underlying theories and practices.

tors (Dunlop, 1999; Walsh, 1993), and environmental ethicists (Cheney, 1993; Plumwood, 1991) that there are no

However, they can impede thinking when they lead to dichotomies or dualistic thinking. And thinking about environmental education does not fit neatly into education or advocacy categories.

The concept of education is difficult. Not only has it developed and changed over time, it suggests a fluidity of meaning that shifts across a range of contexts (e.g., Jickling, 1997; Peters, 1973; Walsh, 1993; Williams, 1976). Nevertheless, it is helpful to have a framework that maps out the conceptual ground on which education rests. Paddy Walsh (1993) has developed a useful “geometry of education” or matrix of distinctions, which helps to capture the term’s essential fluidity and contestability. One scale of this matrix, particularly useful to this discussion, runs from very *open* or general uses of education to very *loaded* uses (see Figure 1). On the one end, a very open conception of environmental education focuses on general uses of the term, characterized by an overall interest in environmental matters, an acquisition of relevant knowledge to understand (and maybe act on) these matters, and a focus on processes for enabling thinking. The discussion is somewhat “sanitized” and safe. This end of the scale leans away from advocacy. On the other end of the scale, a very loaded conception of education focuses more on prescribing education ends and resolutions to particular issues. The prescriptions may be controversial, leading, or doctrinaire. Practitioners leaning towards this end of the scale favor advocacy.

What is important about this approach is that conceptions of education do not occur at fixed locations along this continuum. Rather, they occur as more fluid interplays or dialectics between the twin poles of this range. Meanings are prone to subtle shifts and reinterpretations in complex responses to everyday events. What we need to do will not be found at one end or the other of the advocacy–nonadvocacy oppositions but will be found on a case-by-case, context-by-context basis in a mediated and negotiated third space.

Two Examples

In attempting to chart the way through such difficult cases, it can be useful to see what others have done and

Open Loaded (away from advocacy) (toward
advocacy)

FIGURE 1. From a matrix of distinctions (after Walsh, 1993).

what has happened to them and their students, as demonstrated by the following two examples.

Mining Issues in the Yukon

A particularly volatile issue emerged after Yukon school children published letters in a local newspaper that expressed concern about the future of mining in the region and suggested that a new approach in the industry may be needed. The children struggled to balance the environmental health in the region against economic interests and con-

sumer desires. Although some letters seemed naive, they did reveal an earnest desire to mediate tensions between competing interests. The results generally led toward recommendations designed to moderate, not eliminate, mining.

Predictably, the mining industry reacted negatively to the letters and accused the children’s teacher, the school, and the curricula of bias. Mining officials concluded that remedial action was required and that, in conjunction with the Yukon Department of Education, they should develop a “Mining Curriculum” for Yukon schools. A number of letters and articles written by citizens representing all sides of this issue were published in the local papers. Directed not to respond by the Department of Education, school officials were conspicuously absent from these public discussions.

Land Rehabilitation in Australia

This Australian project focused on restoring land degraded by bauxite mining, so children could interact with the earth and develop a growing sense of agency and empowerment concerning their environment (Spencer, 1995). The project involved working closely with Yungul (aboriginal) people of the region. Although the class did not seek to critically examine cultural and societal values, it was felt that contact with the Yungul might provide alternative visions of future worlds that would challenge the industrial mentality and common economic measures of achievement and progress.

As the project evolved, the teacher became increasingly uneasy about possible contradictions between the level of industrial development in the region and the rehabilitation project with its indigenous involvement and emotional responses to the land. The author of the project report felt that aspects of the activity lent themselves perfectly to critical examination of social and political aspects of mining. The teacher, however, felt that her students were too young to deal with the interdependence of ecological, political, social, and economic issues.

Discussion of the Two Examples

These two examples point to choices and some inherent dangers in teaching environmental education, although as Spencer (1995) pointed out, it is not realistic to expect any one program to fulfill all established criteria for environmental education.

In the Yukon example, the teacher and her students did elect to examine some of the philosophical and political dimensions of mining. Publishing their letters was a politi-

cal statement. The response of the mining industry was also Jickling 25 these practices are not value free, building in

indetermin

political. The education system was publicly chastised and censored. It is hard to know what messages have endured within the educational community and in the lives of the students. Although a number of residents replied publicly, the overwhelming impression was one of acquiescence and compliance. It is realistic to expect that many teachers

learned to “keep their heads down,” and some students learned the “virtue” of silence.

This discussion should not be taken as an indictment of the teacher involved; no one could have anticipated the fury of the opposition and the political interference in the education system. A spirited justification based on sound pedagogy and education theory might have made a significant difference.

The Australian project was less loaded than the Yukon example. As the project evolved, the teacher became more philosophically and politically aware. She came to understand that a much more radical critique of society might be required of educators, although she was unsure where to begin (Spencer, 1995). Through its work with local aboriginal people, the project has addressed some of the silences (null curricula) frequent in discourses surrounding industrial development. Both approaches seem important, and both involve risk, courage, and readiness to defend one's actions.

Some Tentative Guideposts

In posing the question, “Why shouldn't environmental educators take strong ethical positions when teaching about the obvious dangers facing the world's ecosystems?”, Clifford Knapp (1999, p. 19) invites us yet again to consider our job as environmental educators. It is easy to retreat from controversy, to reduce environmental education to sanitized discussions, to avoid issues, and to stick to the trivial. So we must now summon the courage to stare down and open the question up to the voices hiding within it (after Jardine, 2000). This is the tough work of good education.

Finding our way, discovering those lurking possibilities, calls for tolerating ambiguity (Dunlop, 1999), because there is not a “right” answer. The following tentative guideposts may assist educators grappling with these issues:

- *Embrace ambiguity.* Ambiguity should not paralyze or confuse but should invite tentativeness. It acknowledges multiple realities and truths and creates intellectual and practical space for creativity—developing new ideas and new emotions and stretching our ways of thinking and being. Ambiguity should create space to move beyond just sustainable development—to allow room for Green peace, Gaianists, followers of the deep ecology movement, bioregional practitioners, ecofeminists, and other “radicals.”
- *Build in indeterminacy.* As our practices become more advocacy oriented, they become more loaded and more prescriptive. As our practices become more loaded, they become more adamant and more confident. Sometimes they become less inclusive of divergent ideas. Although
nacy can enable students to move beyond our interests
and our prescriptions, to seize opportunities to disagree,

26 The Journal of Environmental Education

Solid answers to our questions do not exist—a far-from comfortable situation. But as Saul (1995) noted, “a citizen based democracy is built upon participation, which is the very expression of permanent discomfort” (p. 190).

and to explore divergent opinions.

- *Be fair.* Naess's advice is sound: Don't end with your view; finish your discussion with views from other perspectives. This strategy will help to address concerns of critics and may also allow students to reach beyond the instructor's limits. However, economic and industry perspectives may need to be considered. Thus, this strategy may not mean just allowing room for multiple perspectives; it may require actively seeking them.
- *Be a citizen too.* Educators should continue to have an active role in their community affairs. To do otherwise can carry the message that citizen participation is unimportant and makes little difference. At an increasingly cynical juncture in our history, students need more than ever to see mentors “walking their talk.” However, it is crucial to know when our actions and influence impede their progress. Students can be impressionable, and coercion, however subtle or unintentional, is not educational.
- *Select issues carefully.* Our issues are not necessarily our students' issues, and what is important to them may not be as obvious as we think. If we move away from the student-centered program suggested by Simmons (1996), then we may risk loading instruction with our agenda. This loading can be leading to our students, forming a subtle type of coercion.
- *Value controversy.* Issues can be complex and messy, but get involved anyway when you can. A vibrant democracy depends on this participation, which is the very expression of discomfort and controversy. However, there are many ways to become involved. We may take a dive into the political forum or we may seek to reveal “silences”—the null curricula. However, careful preparation is required; success and failure can be separated by a heartbeat. The greater the controversy, the greater the need to present clear, explicit, and defensible educational theory and pedagogy.
- *Be courageous.* Good education that can enable change and can transcend the status quo requires risk. Some of the best education will take place on the edge between present realities and future possibilities. Perhaps it also takes place at that frustratingly movable place—the third space—somewhere along the open-loaded line where education and advocacy find an uneasy balance. Unfortunately, that place is fluid with constantly changing issues and actors. Good teachers will make some mistakes and will, from time to time, have to pull back. However, they will also be pushing the pedagogical and theoretical “envelope.”

In the end, the relationship between education and advocacy remains a difficult one. It will require involvement with major, sometimes controversial, issues and tough work from those who want to reach beyond the easy answers.

NOTES

1. Democracy is also a difficult concept and is more than just a form of government. One useful way to think of democracy comes from John Dewey:

it is primarily a form of associated living, of conjoint communicated experience. The extension in space of the number of individuals who participate in an interest so that each has to refer his own action to that of others, and to consider the actions of others to give point and direction to his own, is equivalent to the braking down of those barriers of class, race and national territory which kept [people] from perceiving the full import of their activity. (1916, p. 87)

2. Fien (2000) has responded to an earlier critique of these ideas, including a number of counter-assertions. Inclusion of this example is intended to show the range of possibilities extant in the literature.

REFERENCES

- Berryman, T. (1999). Relieving modern day Atlas of an illusory burden: Abandoning the hypermodern fantasy of an education to manage the globe. *Canadian Journal of Environmental Education*, 4, 50–68.
- Cheak, M., Volk, T., & Hungerford, H. (2002). *Molokai: An investment in children, the community, and the environment*. Carbondale, IL: The Center for Instruction, Staff Development and Evaluation.
- Cheney, J. (1993). Postmodern environmental ethics: Ethics as bioregional narrative. In S. J. Armstrong & R. G. Botzler (Eds.), *Environmental ethics: Divergence and convergence* (pp. 86–95). New York: McGraw-Hill.
- Dewey, J. (1916). *Education and democracy*. New York: The Free Press.
- Disinger, J. F. (1990). Environmental education for sustainable development? *The Journal of Environmental Education*, 21(4), 3–6.
- Dunlop, R. (1999). Beyond dualism: Towards a dialogic negotiation of difference. *Canadian Journal of Education*, 24(1), 57–69.
- Eisner, E. (1985). *The educational imagination: On the design and evaluation of school programs* (2nd ed.). New York: Macmillan.
- Fien, J. (1993). *Education for the environment: Critical curriculum theory rising and environmental education*. Geelong, Australia: Deakin University Press.
- Fien, J. (2000). "Education for the environment: A critique"—an analysis. *Environmental Education Research*, 6(2), 179–192.
- Haddad, M., Zuzovsky, R., & Yakir, R. (2000). Water in an era of peace: A joint Palestinian and Israeli study on teaching for regional cooperation. *Canadian Journal of Environmental Education*, 5, 238–248.
- Hesslink, F., van Kempen, P. P., & Wals, A. (2000). *ESDebate: International debate on education for sustainable development*. Gland, Switzerland: International Union for Conservation of Nature and Natural Resources.
- Hines, J. M., Hungerford, H. R., & Tomera, A. N. (1986–1987). Analysis and synthesis of research on responsible environmental behavior: A meta-analysis. *The Journal of Environmental Education*, 18(2), p. 1–8.
- Hopkins, C. (1998). Environment and society: Education and public awareness for sustainability. In M. Scoullos (Ed.), *Proceedings of the Thessaloniki International Conference Organised by UNESCO and the Government of Greece* (8–12 December 1997; pp. 169–172) Athens: University of Athens, MIO-ECSD and Ministry for the Environment, Ministry of Education.
- Hungerford, H. R., Peyton, R. B., & Wilke, R. J. (1980). Goals for curriculum development in environmental education. *The Journal of Environmental Education*, 11(3), 42–47.
- Hungerford, H., & Volk, T. (1990). Changing learner behavior through environmental education. *The Journal of Environmental Education*, 21(3), 8–21.
- Jardine, D. (2000). *Under the tough old stars: Ecopedagogical essays*. Brandon, VT: Resource Center for Redesigning Education.
- Jickling, B. (1991a). Environmental education and environmental advocacy: The need for a proper distinction. In R. Lorimer, M. McGonigle, J. P. Revéret & S. Ross (Eds.), *To see ourselves/to save ourselves: Ecology and culture in Canada* (pp. 169–176). Montreal: Association for Canadian Studies.
- Jickling, B. (1991b). Thinking environmentally: Considerations for education and curriculum in the Yukon. Unpublished doctoral dissertation, Simon Fraser University, British Columbia, Canada.
- Jickling, B. (1992). Why I don't want my children to be educated for sustainable development. *The Journal of Environmental Education*, 23(4), 5–8.
- Jickling, B. (1997). If environmental education is to make sense for teachers, we had better rethink how we define it! *Canadian Journal of Environmental Education*, 2, 86–103.
- Jickling, B., & Spork, H. (1998). Education for the environment: A critique. *Environmental Education Research*, 4 (3), 309–327.
- Knapp, C. (1996). A response to Bora Simmons's recent president's message. *Environmental Communicator*, 26(6), 12–21.
- Knapp, C. (1999). Another response to the ongoing Zeph/LaCoss controversy. *Environmental Communicator*, 29(5), 18–19.
- Leopold, A. (1949). *A Sand County almanac*. Oxford, UK: Oxford University Press.
- Livingston, J. A. (1994). *Rogue primate: An exploration of human domestication*. Toronto, Canada: Key Porter Books.
- Manes, C. (1990). *Green rage: Radical environmentalism and the unmaking of civilization*. Boston: Little, Brown.
- McClaren, M. (1997). Reflections on "Alternatives to national standards in environmental education: Process-based quality assessment." *Canadian Journal of Environmental Education*, 2, 36–46.
- Naess, A., & Jickling, B. (2000). Deep ecology and education: A conversation with Arne Naess. *Canadian Journal of Environmental Education*, 5, 48–62.
- Ogle, M. (1999). With regard to Ron LaCoss' Op-Ed and responses to it. . . . *Environmental Communicator*, 29(4), 14–15.
- Peters, R. S. (1973). Aims of education: A conceptual inquiry. In R. S. Peters (Ed.), *The philosophy of education* (pp. 11–57). Oxford, UK: Oxford University Press.
- Plumwood, V. (1991). Nature, self, and gender: Feminism, environmental philosophy, and the critique of rationalism. *Hypatia*, 6(1), 3–21.
- Sanera, M. (1998a). Environmental education: Promise and performance. *Canadian Journal of Environmental Education*, 3, 9–26.
- Sanera, M. (1998b). Rejoinder. *Canadian Journal of Environmental Education*, 3, 67–81.
- Sanera, M., & Shaw, J. (1996). *Facts not fear: A parent's guide to teaching children about the environment*. Washington, DC: Regnery.
- Saul, J. R. (1995). *The unconscious civilization*. Concord, Ontario, Canada: Anansi.
- Sauvé, L., Berryman, T., & Brunelle, R. (2000, October). International proposals for environmental education: Analysing a ruling discourse. Paper presented at the International Conference in Environmental Education: Environmental Education in the Context of Education for the 21st Century: Prospects and Possibilities, Larisa, Greece.
- Selby, D. (1996). Relational modes of knowing: Learning process implications of a humane and environmental ethic. In B. Jickling (Ed.), *A colloquium on environment, ethics, and education* (pp. 49–60). Whitehorse, Canada: Yukon College.
- Sia, A. P., Hungerford, H. R., & Tomera, A. N. (1985–1986). Selected predictors of responsible environmental behavior: An analysis. *The Journal of Environmental Education*, 17(2), 31–40.
- Simmons, B. (1996). President's message. *Environmental Communicator*, 26(4), 2–3.
- Spencer, D. (1995). The Gayngaru land rehabilitation project. In J. Andrew & I. Robottom (Eds.), *Environmental education across Australia: Study guide* (pp. 119–129). Geelong, Australia: Deakin University Press.
- Stapp, W. B., Bennett, D., Bryan, W. Jr., Fulton, J., MacGregor, J., Nowak, P., et al. (1969). The concept of environmental education. *The Journal of Environmental Education*, 1(1), 30–31.
- United Nations Conference on Environment and Development. (1992). *Agenda 21, the United Nations programme of action from Rio*. New York: United Nations Department of Public Information.
- Walsh, P. (1993). *Education and meaning: Philosophy in practice*. London: Cassell.
- Weston, A. (1992). Before environmental ethics. *Environmental Ethics*, 14(4), 321–338.
- Williams, R. (1976). *Keywords: A vocabulary of culture and society*. London: Fontana.
- World Commission on Environment and Development. (1987). *Our common future*. Oxford, UK: Oxford University Press.

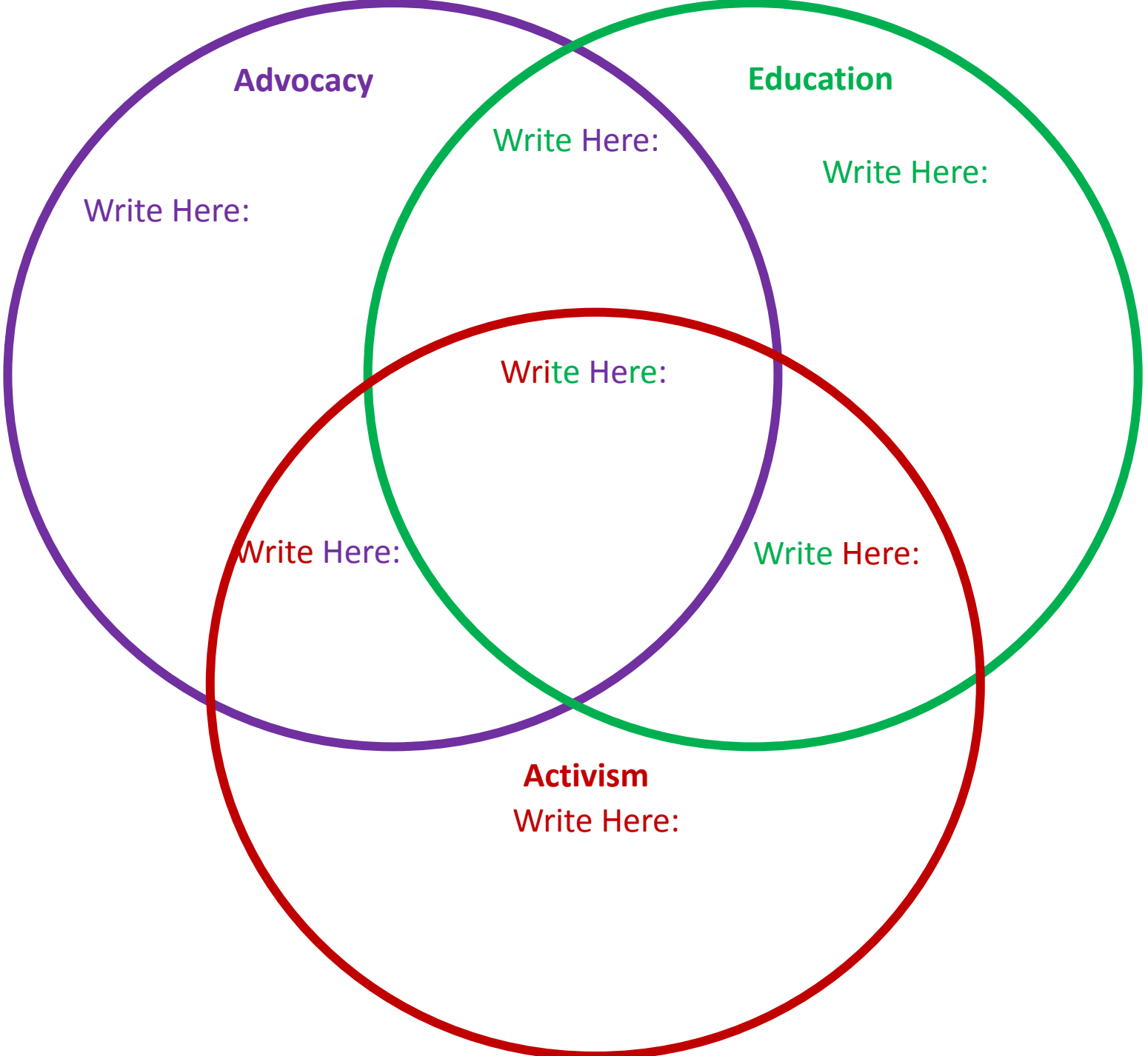
[View publication stats](#)

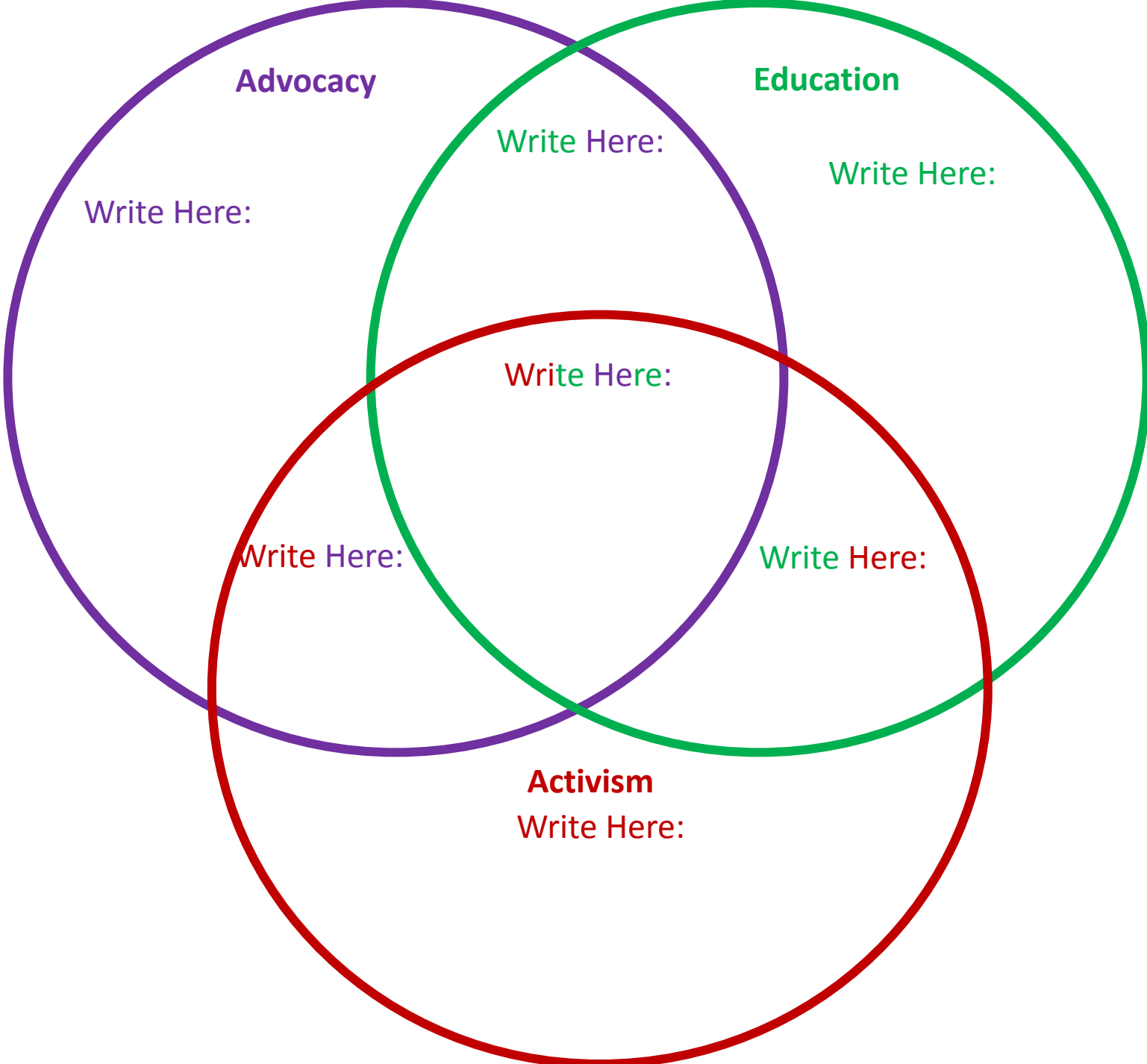
Jickling 27

Zeph, P. (1998). President's message. *Environmental Communicator*, 28(6), 2–3.

Zuzovsky, R. (2000). Water in an era of peace: Teaching for regional cooperation in a multicultural setting. *Canadian Journal of*

NAME:





Advocacy

Education

Write Here:

Write Here:

Write Here:

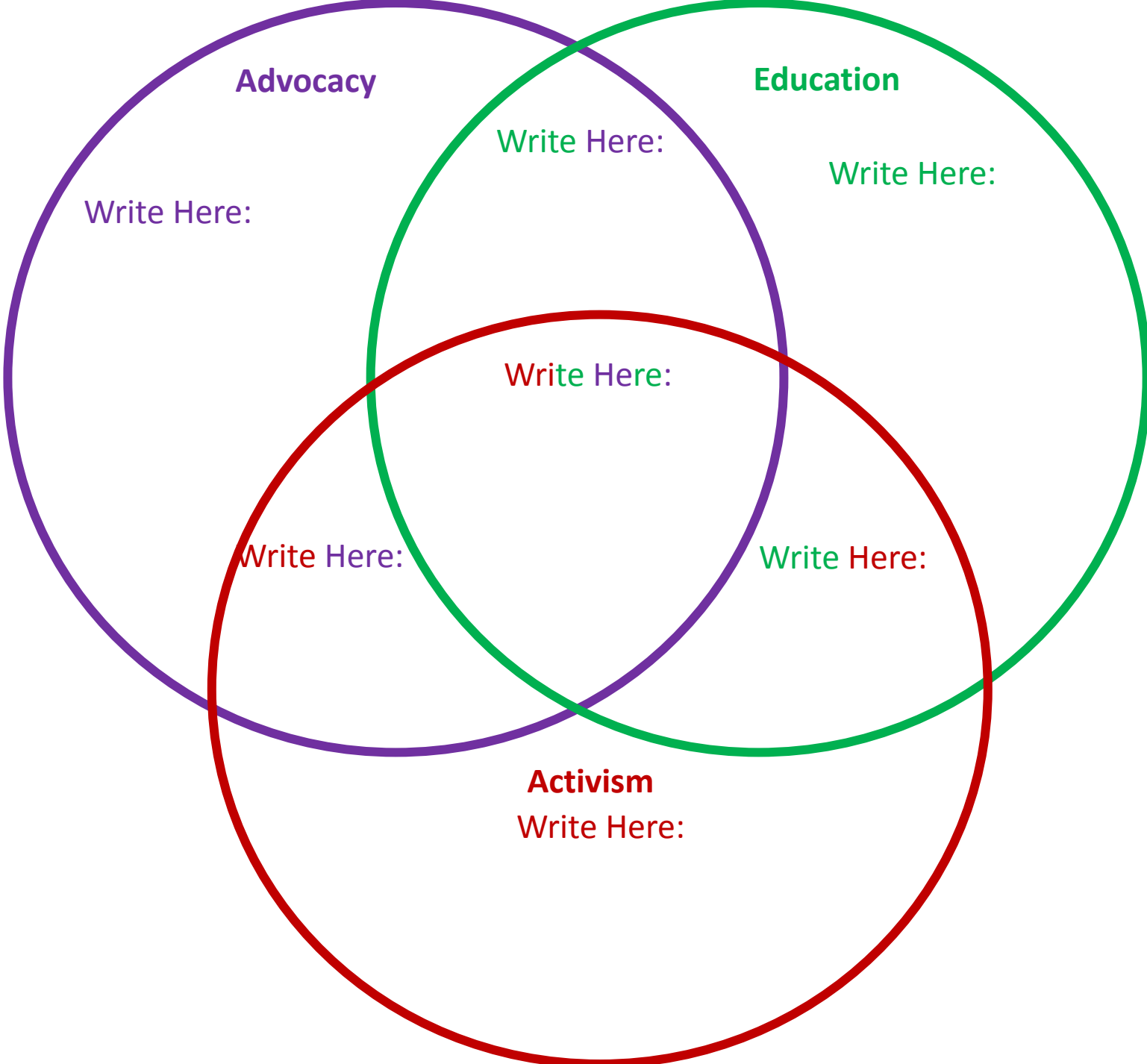
Write Here:

Write Here:

Write Here:

Activism

Write Here:



Advocacy

Education

Activism

Write Here:

Write Here:

Write Here:

Write Here:

Write Here:

Write Here:

Write Here:

Module 4: Scenario Tables

Scenario 1: Li Na is a formal educator who teaches environmental science to elementary students at a public school. One of the topics that she will be teaching next semester is microplastics and the impact on the environment – specifically water quality and ingestion by wildlife. Her personal view is that all plastics should be banned yet your school resides in a county where there is a large plastics manufacturer that employs a large majority of the student’s parents. Her school also cannot afford to substitute plastic utensils and disposable lunch trays with compostable options.

Scenario 2: Gary is an education interpreter at a new, local, environmental non-profit that aims to educate communities on climate change impacts, stewardship, and resiliency. On very high tides and during rain storms, the parking lot and front lobby of his building will flood, as will the yards and front stoops of nearby homes. The majority of people who are served by Gary’s organization are passionate about finding a solution to the flooding; they also hold the view that climate change is solely due to natural phenomena. He is in charge of developing interpretation signage, educational hand-outs, and community programming and he is personally committed to addressing the impacts of climate change as a result of people’s actions.

Scenario 3: Jo is the environmental educator for coastal marine education center that has a stance against offshore drilling. While she is passionate about the marine environment, she comes from a long-line of family members who have served in the military, often overseas in regions where the U.S. receives vast amounts of oil. She has personal experience with loss due to some of these wars and she view reducing our impact on foreign oil (i.e., saving lives) vastly outweighs the negative environmental impact. Most all of the participants to her programs are fiercely against offshore drilling and she is often asked to provide presentations supporting the banning of offshore drilling.

Scenario 4: Richard moved to South Carolina from Florida and currently leads natural history trips as part of an eco-tourism business in the upstate. One of his favorite topics to address is native plants – particularly those rare and endemic species such as the Oconee Bell. One of the areas he likes to conduct trips takes groups through an area that was dammed and flooded several decades ago to generate hydro-electric power for the area. This action provided jobs and economic stability for the area yet negatively impacted the environment. In his view, the economic benefits did not outweigh the wildlife and vegetation casualties. On his trips, he often gets a mixture of out-of-town visitors, new residents, and multi-generational residents of the area –some of whom are employed by the hydro-electric plant -- who are curious about both the natural history and the history of the dam/creation of hydro-electric plant.

Name:

Scenario (Circle 1): 1, 2, 3, 4

Do's	Don'ts	Other Perspectives to Consider	Resources Supporting Other Perspectives

Do's	Don'ts	Other Perspectives to Consider	Resources Supporting Other Perspectives

Scenario (Circle 1): 1, 2, 3, 4

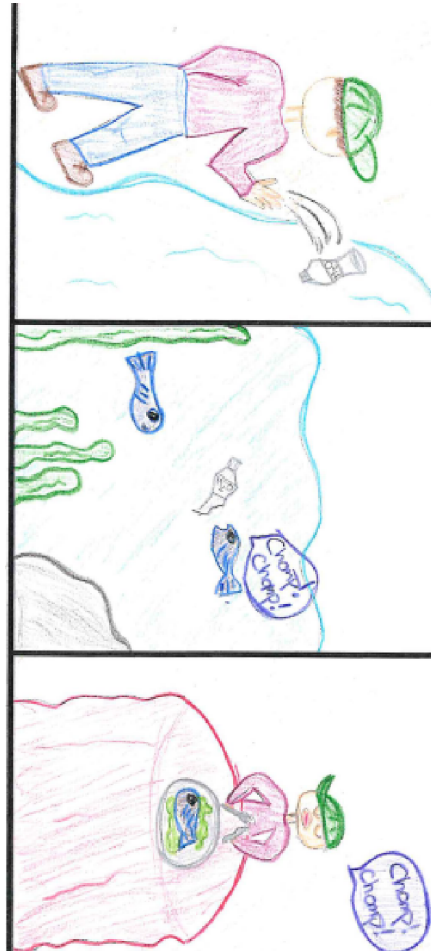
Module 4 Essay

Name:

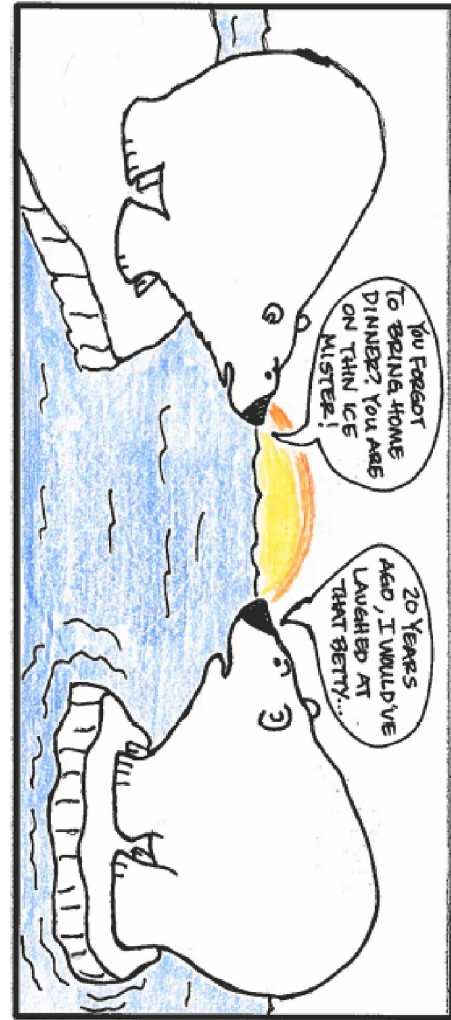
Directions: Using references from at least four of the articles, opinion pieces, and/or review material, please answer these questions (in no particular order) in the form of a two-page essay:

- Has your perception changed on the role of environmental education with respect to advocacy and activism? If yes, please describe. If no, please elaborate on how your view was reinforced.
 - Why is it important (and difficult) to separate environmental education from environmental advocacy/activism?
 - Reflect on an experience in which you were the educator for a controversial environmental topic that a) you were personally passionate and b) historically has differing viewpoints (e.g., climate change). How might you adjust this program in the future with regard to content and delivery? Would you/how would you address differing viewpoints on your topic while balancing your own views?
-

Bumper Sticker Examples



Full Circle or kill me later





Cartoon Template #1



Cartoon Template #2

Cartoon Template #3

--	--	--